

Applicant: Beecroft et al.
Application No.: 10/714,696

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 1-21 are currently pending in this application. Claims 1, 9 and 17 are amended.

Claim Rejections - 35 USC §102

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,133,940 to Blightman et al. (hereinafter Blightman).

It appears that the Examiner has misunderstood Applicants disclosed method and apparatus and the differences over the cited reference. The Examiner states that,

Applicant's use of "user process" is broad.

Applicant respectfully disagrees. The term user process is well known to those having skill in the art. User process may be defined as a program or application run on top of the base operating system. In conventional networks, a user process makes system calls to the operating system which in turn generates a stream of commands to a network interface. Therefore, the Examiner's argument that Blightman's command is equivalent to a user process is incorrect.

As Applicant has previously explained, Applicant discloses a network and method wherein at least two processing nodes each having a processor on which one or more user processes are executed and a respective interface and a switching network which operatively connects the at least two processing nodes together.

Each network interface including a command processor and an addressable memory wherein the command processor is configured to allocate one or more segments of the addressable memory for the exclusive use of a user process as one or more command queues mapped by the network interface to the allocated addressable memory. Blightman does not disclose the exclusive allocation of addressable memory to a user process.

Brightman discloses a queue which contains DMA commands with address values pointers wherein the commands on the queue are pushed and popped to ensure fast turnaround. There is no disclosure in Brightman regarding the exclusive use of addressable memory to provide a user process with its own command queue with which to issue one or more commands. Again, the DMA queue in Brightman contains a plurality of DMA commands that are associated with a plurality of user processes. The DMA command queue is not exclusively assigned to a user process as disclosed by Applicant in claims 1, 9 and 17.

In the portions of Brightman cited by the Examiner, it is made clear that the DMA command queues receives commands from the processor, without regard to the user process that initiated them. There is nothing in Brightman to support the Examiner's assertion that the command processor allocates one or more segments of addressable memory for exclusive use by a user process.

In fact, the disclosure in paragraph 5, line 35 through column 6, line 66 and Figure 3 support Applicant's argument that the DMA queue merely accepts

commands from a processor in the order received, and pushes and pops these commands accordingly. As such, Blightman does not disclose a command processor configured to allocate one or more segments of addressable memory for exclusive use by a user process as one or more command queues mapped by the network interface to the allocated addressable memory. Further, in Blightman, a user process makes system calls to the kernel which issues a stream of commands to the interface. In our system the user process maps a queue and issues commands directly to the interface.

Moreover, claim 17 further discloses storing one or more commands associated with the user process in the command queue and running the commands in the command queue without further intervention from the processor. Blightman does not disclose either of these elements. The examiner makes no argument also that Blightman, or any other reference, discloses the method as claimed by Applicant's in claim 17.

Accordingly, Blightman does not anticipate Applicant's disclosed method and apparatus as claimed in independent claims 1, 9 and 17.

Claims 2-8, 10-16 and 18-21 are dependent upon claims 1, 9 and 17, and the Applicants believe these claims are allowable over the cited references of record for the same reasons provided above.

Based on the arguments presented above, withdrawal of the 102(e) rejection of claims 1-21 is respectfully requested.

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Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Beecroft et al.

By /Darryl W. Shorter/
Darryl W. Shorter
Registration No. 47,942

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103
Telephone: (215) 568-6400
Facsimile: (215) 568-6499

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Enclosure